Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1.   (Currently Amended) A method ~~of accessing information about a resource associated with a network device,~~ for communicating over a network protocol stack in a network, the method comprising:

~~receiving a request from an application for information about a resource associated with a network device;~~

creating a packet through an application, the packet being a self-contained, independent entity of data including header information for routing the packet to from a source to a destination, the header information being associated with a layer in a multiple layer network protocol stack;

selecting a layer in the multiple layer network protocol stack for communicating with the application ~~requested resource associated with the network device in a network protocol stack having multiple layers~~;

establishing an inner layer socket for ~~communicating at~~ communication between the application and the selected layer using an inner layer application programming interface (IL API) ~~and a socket identifier associated with the requested resource~~, wherein the ~~inner layer socket communicates using the selected layer and~~ communication between the application and the selected layer bypasses other layers in the multiple layer network protocol stack; and

transmitting the ~~request for information about the resource~~ packet including the header information from the application to the selected layer through the inner layer socket. ~~and the socket identifier;~~

~~receiving the information about the resource in response to the transmission made through the inner layer socket; and~~

~~passing the information about the resource through the inner layer socket to the application making the request.~~

2.   (Currently Amended) The method of claim 1, wherein ~~said request~~ the header information includes header information associated with a transport layer and the inner layer socket is a transport socket.

3.   (Currently Amended) The method of claim 2, wherein the multiple layer network protocol stack is compatible with TCP/IP and the transport socket is compatible with a TCP or UDP transport layer protocol.

4.   (Currently Amended) The method of claim 1, wherein ~~said request~~ the header information includes header information associated with a network layer and the inner layer socket is a network socket.

5.   (Currently Amended) The method of claim 4, wherein the multiple layer network protocol stack is compatible with TCP/IP and the network socket is compatible with an IP network layer protocol.

6.   (Currently Amended) The method of claim 1, wherein ~~said request~~ the header information includes header information associated with a link layer and the inner layer socket is a link socket.

7.   (Currently Amended) The method of claim 6, wherein the multiple layer network protocol stack is compatible with TCP/IP and the link socket is compatible with a link layer

protocol.

8.   (Currently Amended) The method of claim 1, wherein selecting a layer in a the multiple layer network protocol stack further includes ~~determining~~ selecting the layer in the multiple layer network protocol stack based on a type of the packet created by the application ~~that the requested resource uses for communication~~.

9.   (Cancelled)

10.   (Cancelled)

11.   (Cancelled)

12.   (Currently Amended) The method of claim 1, wherein the IL API further provides a transport socket to access transport layer information in the multiple layer network protocol stack, a network socket to access network layer information in the multiple layer network protocol stack, a link socket to access link layer information in the multiple layer network protocol stack, and a physical socket to access physical port information in the multiple layer network protocol stack.

13.   (Currently Amended) The method of claim 1, wherein the IL API further provides a different socket communication interface for each layer of communication available in the multiple layer network protocol stack.

14.   (Currently Amended) The method of claim 1, wherein an the application communicates with the IL API using object –oriented instructions and the IL API interfaces with the multiple layer network protocol stack through instructions executable on a virtual-machine compatible with the multiple layer network protocol stack.

15.   (Original) The method of claim 13, wherein the object-oriented instructions are compatible with the Java programming language.

16.   (Currently Amended) An apparatus for ~~accessing information about a resource associated with a network device, comprises~~ communicating over a network protocol stack in a network, the apparatus comprising:

a processor;

a memory for storing instructions when executed on the processor that causes the processor to,

~~receive a request from an application for information about a resource associated with a network device;~~

create a packet through an application, the packet being a self-contained, independent entity of data including header information for routing the packet from a source to a destination, the header information being associated with a layer in a multiple layer network protocol stack;

select a layer in the multiple layer network protocol stack for communicating with the application ~~requested resource associated with the network device in a network protocol stack having multiple layers~~;

establish an inner layer socket for ~~communicating at~~ communication between the application and the selected layer using an inner layer application programming interface (IL API) ~~and a socket identifier associated with the requested resource~~, wherein the ~~inner layer socket communicates using the selected layer and~~ communication between the application and the selected layer bypasses other layers in the multiple layer network protocol stack; and

transmit the ~~request for information about the resource~~ packet including the header information from the application to the selected layer through the inner layer socket. ~~and the socket identifier;~~

~~receive the information about the resource in response to the transmission made~~

~~through the inner layer socket; and~~

~~pass the information about the resource through the inner layer socket to the~~
~~application making the request.~~

17.   (Currently Amended) The apparatus of claim 16, wherein ~~said request~~ the header
information includes header information associated with a transport layer and the inner layer
socket is a transport socket.

18.   (Currently Amended) The apparatus of claim 17, wherein the multiple layer
network protocol stack is compatible with TCP/IP and the transport socket is compatible with a
TCP or UDP transport layer protocol.

19.   (Currently Amended) The apparatus of claim 16, wherein ~~said request~~ the header
information includes header information associated with a network layer and the inner layer
socket is a network socket.

20.   (Currently Amended) The apparatus of claim 19, wherein the multiple layer
network protocol stack is compatible with TCP/IP and the network socket is compatible with an
IP network layer protocol.

21.   (Currently Amended) The apparatus of claim 16, wherein ~~said request~~ the header
information includes header information associated with a link layer and the inner layer socket is
a link socket.

22.   (Currently Amended) The apparatus of claim 21, wherein the multiple layer
network protocol stack is compatible with TCP/IP and the link socket is compatible with a link
layer protocol.

23.   (Currently Amended) The apparatus of claim 16, wherein ~~selecting~~ the instructions to cause a processor to select a layer in a network protocol stack further includes ~~determining~~ instructions to cause a processor to select the layer in the network protocol stack based on a type of the packet created by the application ~~that the requested resource uses for communication~~.

24.   (Cancelled)

25.   (Cancelled)

26.   (Cancelled)

27.   (Currently Amended) The apparatus of claim 16, wherein the IL API further provides a transport socket to access transport layer information in the multiple layer network protocol stack, a network socket to access network layer information in the multiple layer network protocol stack, a link socket to access link layer information in the multiple layer network protocol stack, and a physical socket to access physical port information in the multiple layer network protocol stack.

28.   (Currently Amended) The apparatus of claim 16, wherein the IL API further provides a different socket communication interface for each layer of communication available in the multiple layer network protocol stack.

29.   (Currently Amended) The apparatus of claim 16, wherein ~~an~~ the application communicates with the IL API using object –oriented instructions and the IL API interfaces with the multiple layer network protocol stack through instructions executable on a virtual-machine compatible with the multiple layer network protocol stack.

30.   (Original) The apparatus of claim 29, wherein the object-oriented instructions are compatible with the Java programming language.

31.   (Currently Amended) An apparatus for accessing information about a resource associated with a network device, comprising:

~~means for receiving a request from an application for information about a resource associated with a network device;~~

means for creating a packet through an application, the packet being a self-contained, independent entity of data including header information for routing the packet from a source to a destination, the header information being associated with a layer in a multiple layer network protocol stack;

means for selecting a layer in the multiple layer network protocol stack for communicating with the application ~~requested resource associated with the network device in a network protocol stack having multiple layers~~;

means for establishing an inner layer socket for ~~communicating at~~ communication between the application and the selected layer using an inner layer application programming interface (IL API) ~~and a socket identifier associated with the requested resource~~, wherein the ~~inner layer socket communicates using the selected layer and~~ communication between the application and the selected layer bypasses other layers in the multiple layer network protocol stack; and

means for transmitting the ~~request for information about the resource~~ packet including the header information from the application to the selected layer through the inner layer socket. ~~and the socket identifier;~~

~~means for receiving the information about the resource in response to the transmission made through the inner layer socket; and~~

~~passing the information about the resource through the inner layer socket to the application making the request.~~

32.   (Currently Amended) A computer program, tangibly stored on a computer-readable medium, comprising instructions for ~~accessing information about a resource associated with a network device~~ communicating over a network protocol stack in a network, the computer program comprising instructions to:

~~receiving a request from an application for information about a resource associated with a network device;~~

create a packet through an application, the packet being a self-contained, independent entity of data including header information for routing the packet from a source to a destination, the header information being associated with a layer in a multiple layer network protocol stack;

select ~~selecting~~ a layer in the multiple layer network protocol stack for communicating with the application ~~requested resource associated with the network device in a network protocol stack having multiple layers~~;

establish ~~establishing~~ an inner layer socket for ~~communicating at~~ communication between the application and the selected layer using an inner layer application programming interface (IL API) ~~and a socket identifier associated with the requested resource~~, wherein the ~~inner layer socket communicates using the selected layer and~~ communication between the application and the selected layer bypasses other layers in the multiple layer network protocol stack; and

transmit ~~transmitting~~ the ~~request for information about the resource~~ packet including the header information from the application to the selected layer through the inner layer socket. ~~and the socket identifier;~~

~~receiving the information about the resource in response to the transmission made through the inner layer socket; and~~

~~passing the information about the resource through the inner layer socket to the application making the request.~~

33.   (New) The method of claim 1, further comprising transmitting the packet from the source to the destination over the network based on the header information in the packet.

34.   (New) The method of claim 33, wherein the header information includes header information for routing the packet from a source computer to a destination computer.

35.   (New) The apparatus of claim 16, wherein the instructions further includes instructions to cause the processor to transmit the packet from the source to the destination over the network based on the header information in the packet.

36.   (New) The apparatus of claim 35, wherein the header information includes header information for routing the packet from a source computer to a destination computer.

37.   (New) The apparatus of claim 31, further comprising means for transmitting the packet from the source to the destination over the network based on the header information in the packet.

38.   (New) The computer program of claim 32, further comprising instructions to transmit the packet from the source to the destination over the network based on the header information in the packet.